Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) Handsfree \underline{A} system for use in a vehicle comprising:

a microphone array with at least two microphones; and

a signal processing means where the signal processing means comprises a

superdirective beamformer with fixed superdirective filters;

where the superdirective beamformer is a regularized superdirective

beamformer using a finite regularization parameter μ that is frequency dependent.

2-3. (canceled)

4. (currently amended) Handsfree A system according to claim 1 where each

superdirective filter results from an iterative design based on a predetermined maximum

susceptibility.

5. (currently amended) Handsfree A system according to claim 1 where each

superdirective filter comprises a filter in the time domain.

6. (currently amended) Handsfree A system according to claim 1 where the signal

processing means further comprises at least one inverse filter for adjusting a microphone

transfer function.

7. (currently amended) Handsfree A system according to claim 6 where the at least one

inverse filter comprises a warped inverse filter.

Appl. No. 10/563,072 Amdt. dated 11/16/2009 Reply to Office action of 08/14/2009

8. (currently amended) Handsfree A system according to claim 6 where each inverse

filter comprises an approximate inverse of a non-minimum phase filter.

9. (currently amended) Handsfree A system according to claim 6 where each inverse

filter is combined with a superdirective filter of the beamformer.

10. (currently amended) Handsfree A system according to claim 1 where the beamformer

comprises the structure of a generalized sidelobe canceller (GSC).

11. (currently amended) Handsfree A system according to claim 1 where the beamformer

comprises a minimum variance distortionless response (MVDR) beamformer.

12. (currently amended) Handsfree A system according to claim 1 where the microphone

array comprises at least two microphones arranged in an endfire orientation with respect

to a first position.

13. (currently amended) Handsfree A system according to claim 12 where the

microphone array comprises at least two microphones arranged in endfire orientation

with respect to a second position.

14. (currently amended) Handsfree A system according to claim 13 where the at least two

microphones in the first endfire orientation and the at least two microphones in the

second endfire orientation comprise a microphone in common.

15. (currently amended) Handsfree A system according to claim 1 where the microphone

array[[s]] comprises at least two subarrays.

16. (currently amended) Handsfree A system according to claim 15 where the at least two

subarrays comprise at least one microphone in common.

Page 3 of 10

- 1.
- 17. (currently amended) Handsfree \underline{A} system according to claim 1 further comprising a frame where each microphone of the microphone array is arranged in a predetermined position in or on the frame.
- 18. (currently amended) Handsfree \underline{A} system according to claim 17 where the predetermined position comprises a fixed position in or on the frame.
- 19. (currently amended) Handsfree \underline{A} system according to claim 1 where at least one microphone comprises a directional microphone.
- 20. (currently amended) Handsfree \underline{A} system according to claim 19 where the directional microphone comprises a directional microphone with a cardioid characteristic.
- 21. (currently amended) Handsfree \underline{A} system according to claim 19 where the directional microphone comprises a differential microphone.
- 22. (currently amended) Handsfree A system according to claim 1 comprising a vehicle coupled to the microphone and the beamformer.
- 23. (currently amended) Handsfree A system for use in a vehicle comprising: a microphone array with at least two microphones and a superdirective beamformer having fixed superdirective filters;

where the superdirective beamformers are configured with a predetermined susceptibility that is based on a relative error of the microphone array.

24. (currently amended) Handsfree \underline{A} system according to claim 23 where the relative error of the microphone array is a sum of mean square error of transfer properties of each microphone in the microphone array and a gaussian error with zero mean of microphone positions.

Appl. No. 10/563,072 Amdt. dated 11/16/2009 Reply to Office action of 08/14/2009

25. (currently amended) Handsfree \underline{A} system according to claim 23 where at least two microphones in the microphone array are arranged in an endfire orientation with respect

to a first position.

26. (currently amended) Handsfree A system according to claim 25 [[were]] where at

least two microphones in the microphone array are arranged in an endfire orientation with

respect to a second position.

27. (currently amended) Handsfree A system according to claim 23 where at least one

microphone comprises a directional microphone.

28. (currently amended) Handsfree A system according to claim 27 where the directional

microphone comprises a directional microphone with a cardio characteristic.

29. (currently amended) Handfree A system according to claim 27 where the directional

microphone comprises a differential microphone.